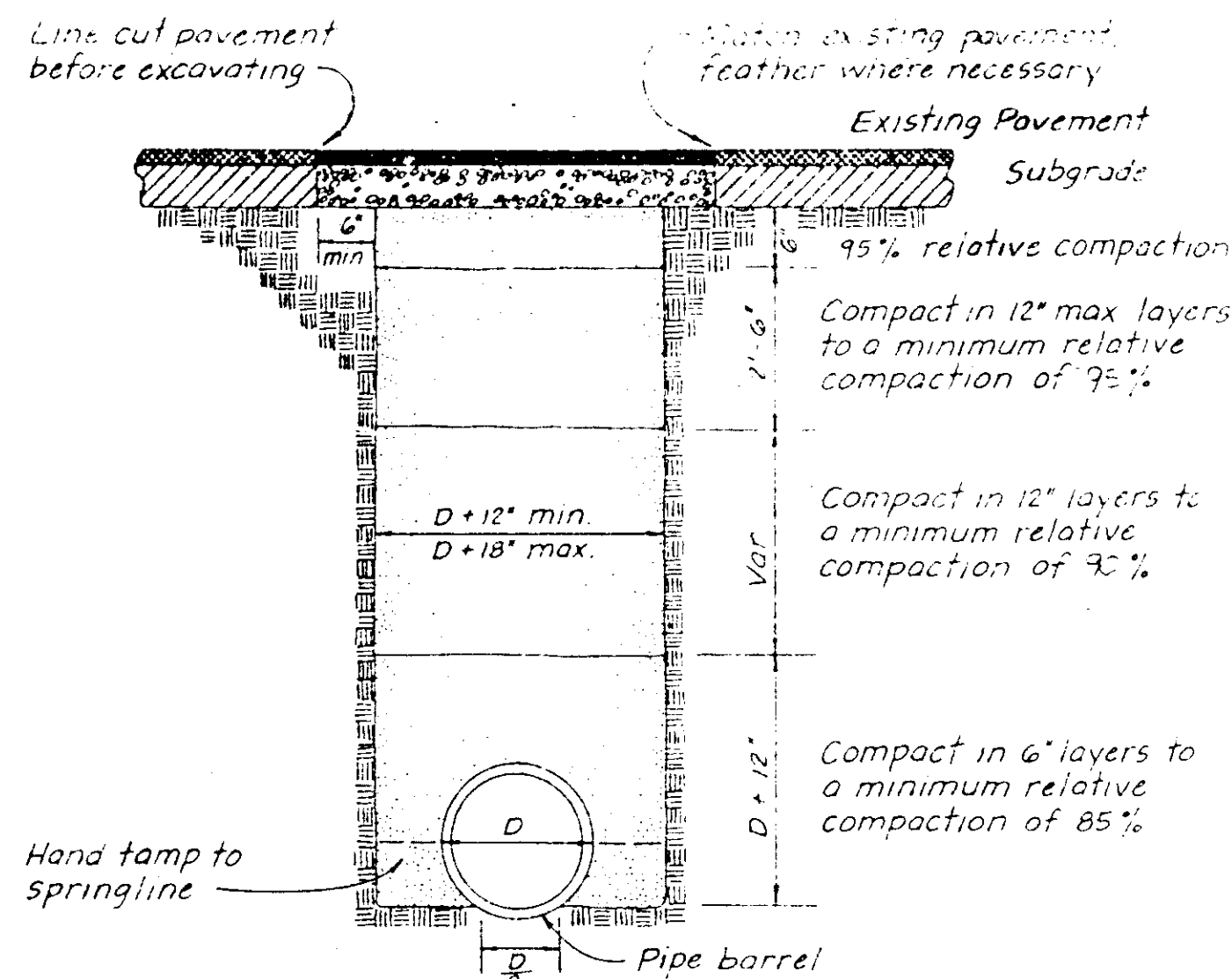




- 1 Trenching in easements and other areas not in street R/W may be backfilled with native material to a relative compaction of 85%.
- 2 Over-excavate trench bottom under couplings to provide uniform support along pipe barrel.
- 3 No jetting or ponding will be permitted unless by special approval of the District Engineer.
- 4 Pavement Section shall be equivalent to existing pavement but in no case less than 4" of AB and 2" AC on Class 'A' subgrade
- 5 Testing of street subgrade and aggregate base, and testing of utility line trench backfill shall be done by a qualified foundation or soils testing laboratory at the direction of the District Engineer. Fees for testing shall be paid for by the Contractor, including any retests required. Test results shall be submitted to the District Engineer as soon as possible.

1	PIPE BEDDING AND TRENCH BACKFILL
---	----------------------------------

GENERAL NOTES:

1. INSTALLATION OF ALL SANITARY SEWER IMPROVEMENTS SHALL CONFORM TO THE STANDARDS OF THE WOODBRIDGE SANITARY DISTRICT.

2. AFTER FINAL BACKFILLING HAS BEEN COMPLETED, AND PRIOR TO TESTING, THE CONTRACTOR SHALL CLEAN ALL SEWER LINES.

A HEAVY RUBBER SEWER BALL HAVING AN OUTSIDE DIAMETER EQUAL TO THE INSIDE DIAMETER OF THE PIPE TO BE CLEANED SHALL BE INFLATED SO THAT IT WILL FIT SNUGLY INTO THE SEWER LINE. THE BALL SHALL BE INSERTED IN THE PIPE LEADING FROM THE HIGHEST MANHOLE IN ANY SECTION OF LINE AND WATER INTRODUCED INTO THE MANHOLE BACK OF THE BALL. THE BALL SHALL PASS THROUGH THE PIPE WITH ONLY A PRESSURE OF WATER BEHIND IT. DEBRIS FLUSHED OUT BY THE BALL SHALL BE REMOVED AT THE LOWER MANHOLE AND DISPOSED OF BY THE CONTRACTOR.

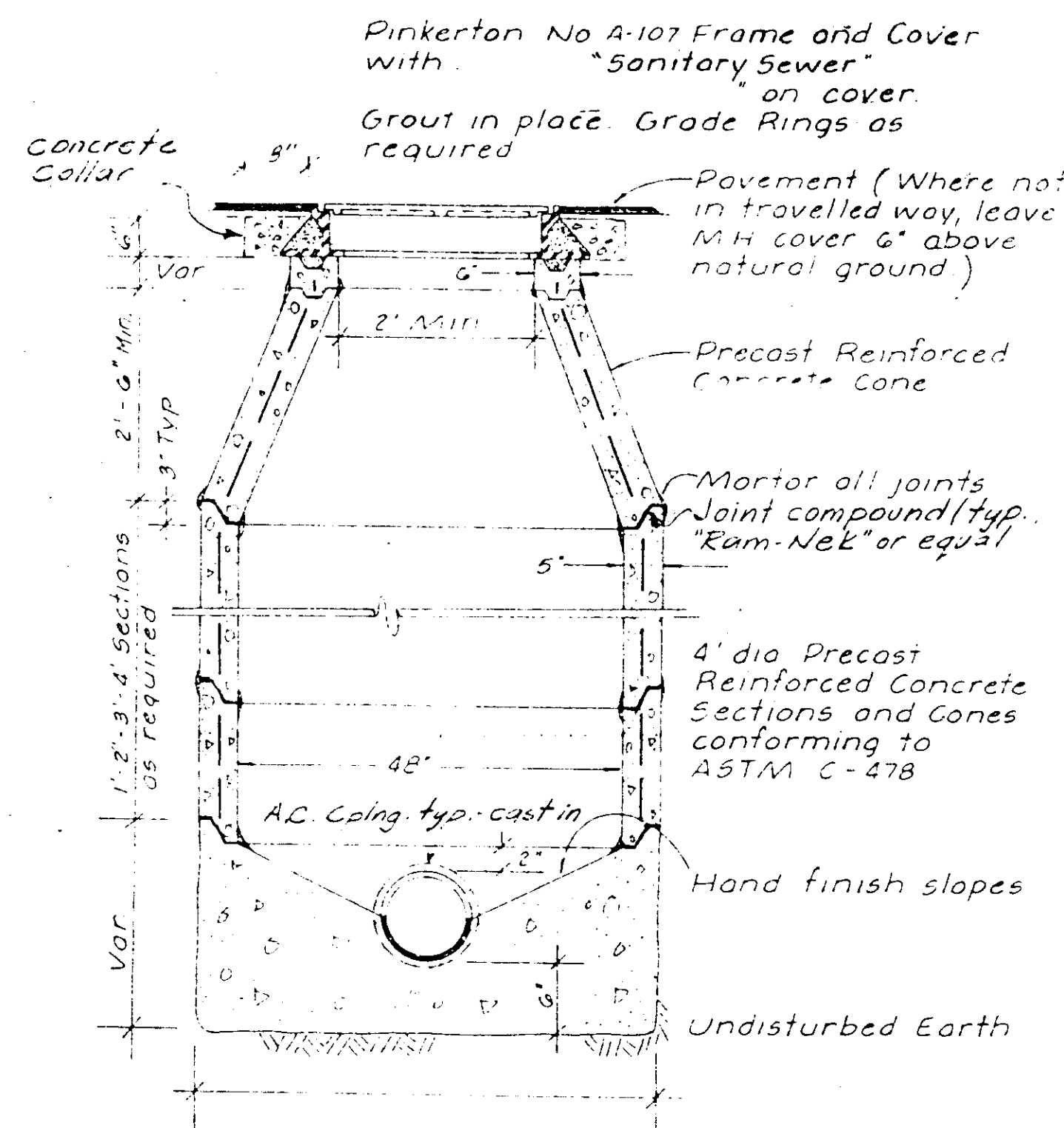
3. AIR PRESSURE TESTING SHALL CONSIST OF PRESSURIZING A SECTION OF PIPEWORK AND MONITORING THE SECTION FOR PRESSURE LOSS. PRIOR TO CONDUCTING AIR PRESSURE TESTING, APPROPRIATE AIR-TIGHT STOPPERS SHALL BE INSERTED IN OPEN ENDS OF THE SECTION TO BE TESTED. A PRESSURE GAGE SHALL BE ATTACHED TO ONE END OF THE STOPPERS TO PREVENT OVER PRESSURIZING THE LINE. A PRESSURE GAGE SHALL BE INSERTED IN ONE OF THE STOPPERS TO MONITOR THE PRESSURE. THE PIPELINE SHALL BE PRESSURIZED TO 3.5 PSIG AND THE TIME IT TAKES FOR THE PRESSURE TO DROP FROM 3.5 PSIG TO 3.0 PSIG, SHALL BE DETERMINED USING A STOP WATCH.

THE MINIMUM TIME REQUIREMENTS FOR THE 0.5 PSIG PRESSURE DROP SHALL NOT BE LESS THAN THAT SHOWN IN THE FOLLOWING TABLE:

<u>PIPE SIZE</u>	<u>MINIMUM TIME</u>
4	2 MIN. 32 SEC
6	3 MIN. 50 SEC
8	5 MIN. 6 SEC

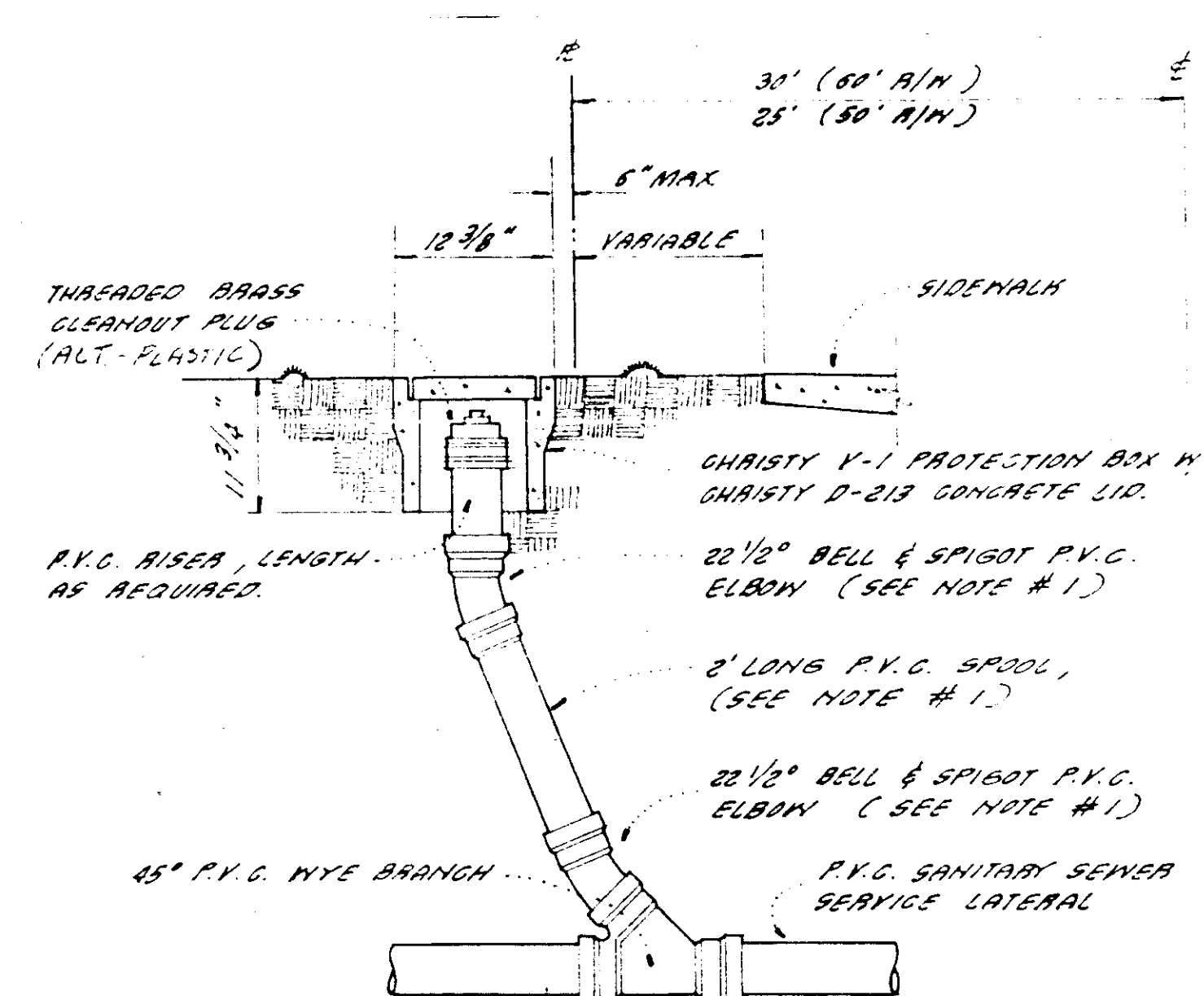
SHOULD THE TEST DISCLOSE AN AIR LOSS GREATER THAN THAT PERMITTED, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE AND REPAIR DEFECTIVE PIPEWORK AND RE-TEST UNTIL THE AIR LOSS RATE IS WITHIN THE SPECIFIED ALLOWANCE.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DAMAGE TO THE WORK ARISING OUT OF THE TESTING AND SHALL, AT HIS OWN EXPENSE, CORRECT ANY EXCESS LEAKAGE AND REPAIR ANY DAMAGE TO THE PIPE AND APPURTENANCES, OR TO ANY STRUCTURES RESULTING FROM, OR CAUSED BY, THESE TESTS. ANY INDIVIDUALLY DETECTABLE LEAK SHALL BE REPAIRED, REGARDLESS OF THE RESULTS OF THE TESTS.



Note Use Class 'B' concrete for all sections

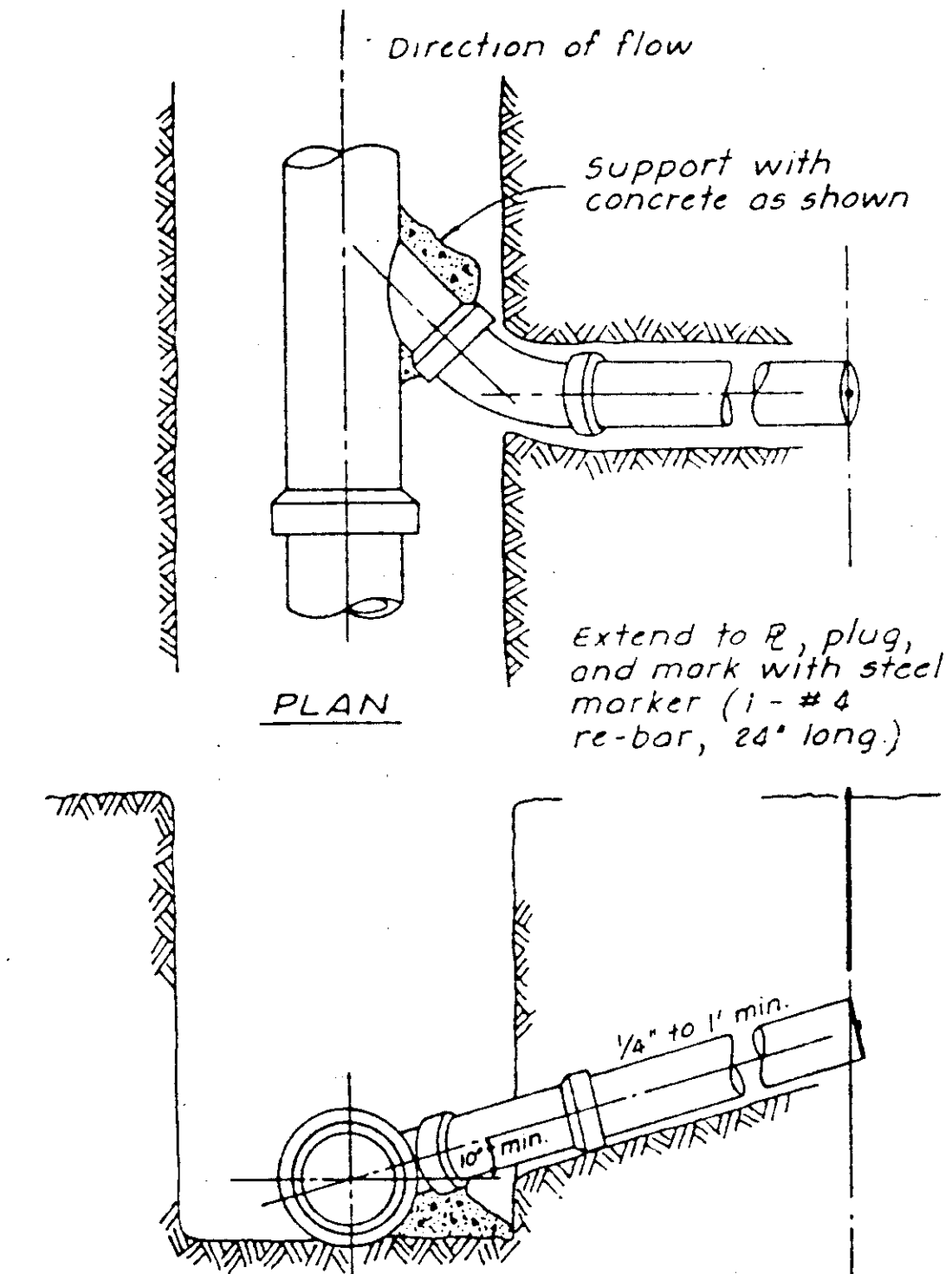
2 | SANITARY MANHOLE



NOTES :

- 1) CONTRACTOR MAY SUBSTITUTE LONG-RADIUS P.V.C. BEND, IF AVAILABLE, FOR THE TWO 22 1/2° ELBOWS & 2' SPOOL.
- 2) CLEARDUTS SHALL BE INSTALLED ON ALL SEWER SERVICE LATERALS AT THE EDGE OF THE RIGHT OF WAY AS SHOWN.
- 3) CLEARDUT RISER AND FITTINGS SHALL BE POLYVINYL CHLORIDE (P.V.C.) PIPE CONFORMING TO ASTM D 3034 - SDR 35 WITH RUBBER RINGS MEETING THE REQUIREMENTS OF ASTM D-3212.
- 4) CLEARDUT RISER AND FITTINGS SHALL BE OF THE SAME DIAMETER PIPE AS THE SERVICE LATERAL.

3 SERVICE LATERAL CLEANOUT



ELEVATION

- Notes : ELEVATION P
- 1) Maintain a 10' edge to edge separation between house lateral and water service line.
 - 2) New hook ups on existing lines requires saddles.

4	WYE BRANCH
---	------------

5. ALL WORK SUBJECT TO INSPECTION AND ACCEPTANCE BY WOODBRIDGE SANITARY DISTRICT PERSONNEL.
6. THE EXISTING UNDERGROUND UTILITIES WERE PLOTTED FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY AGENCIES TO MARK THEIR FACILITIES IN THE FIELD BEFORE ANY EXCAVATION. THE CONTRACTOR SHALL NOTIFY AND COORDINATE ALL WORK WITH ANY AGENCY REQUIRING REMOVAL OR RELOCATION OF THEIR UTILITIES. PACIFIC BELL, P. G. & E., LOST CABLE T.V., AND MOKELUMNE ACRES MAINTENANCE DISTRICT. U.S.A. (800) 642-2444.
7. CONTRACTOR SHALL GIVE DISTRICT ENGINEER, (209) 946-0268, A MINIMUM OF 48 HOURS NOTIFICATION PRIOR TO STAKING ANY UTILITIES, COMMENCING WORK, OR REQUESTING INSPECTIONS.
8. NO MATERIALS RESULTING FROM TAPPING OR CONNECTION PROCEDURES MAY ENTER DISTRICT SEWER.
9. PRIOR TO PERFORMING ANY WORK IN LOWER SACRAMENTO ROAD, THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE SAN JOAQUIN COUNTY DEPARTMENT OF PUBLIC WORKS.
10. ALL MANHOLES TO BE SET FLUSH WITH THE FINISH GRADE UNLESS OTHERWISE INDICATED.
11. SANITARY SEWER SERVICES SHALL BE MARKED BY THE CURB AND GUTTER CONTRACTOR WITH AN "S" STAMPED ON THE TOP OF CURB.
12. SEPARATION OF WATER AND SEWER MAINS (INCLUDING CROSSINGS) AND SEWER LATERALS CROSSING OVER WATER MAINS SHALL MEET OR EXCEED THE LATEST STANDARDS OF THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES.
13. THESE IMPROVEMENT PLANS HAVE BEEN PREPARED WITH THE INTENT THAT THE FIRM OF KJELDSEN-SINNOCK & ASSOCIATES, INC. WILL BE PERFORMING THE CONSTRUCTION STAKING FOR THE PROJECT. IF, HOWEVER, ANOTHER ENGINEERING AND/OR SURVEYING FIRM SHOULD BE EMPLOYED TO USE THESE PLANS FOR THE PURPOSE OF CONSTRUCTION STAKING, NOTICE IS HEREBY GIVEN THAT THE FIRM OF KJELDSEN-SINNOCK & ASSOCIATES, INC. WILL NOT ASSUME ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS; IF ANY, WHICH MIGHT OCCUR AND WHICH COULD HAVE BEEN AVOIDED, CORRECTED OR MITIGATED IF KJELDSEN-SINNOCK & ASSOCIATES, INC. HAD PERFORMED THE STAKING WORK.

BEFORE YOU DIG

CALL TOLL FREE 1 - 800 - 642-2444

"UNDERGROUND SERVICE ALERT"

Minimum Advance Notification of 48 Hours Required

References

1. TITLE 8, ARTICLE 6, 1540, (a), I
DIVISION INDUSTRIAL SAFETY, CONSTRUCTION SAFETY ORDERS
2. RULE 7110, CONTRACTORS LICENSE LAW

9U-2228

BEFORE YOU DIG

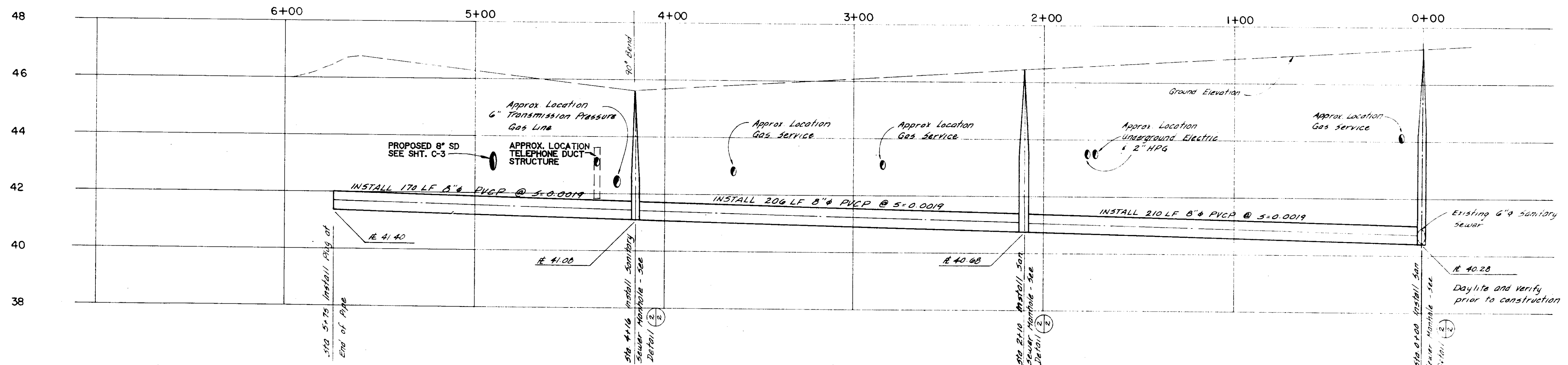
CALL TOLL FREE 1 - 800 - 642-2444

"UNDERGROUND SERVICE ALERT"

Minimum Advance Notification of 48 Hours Required

References

1. TITLE 8, ARTICLE 6, 1540, (a), I
DIVISION INDUSTRIAL SAFETY, CONSTRUCTION SAFETY ORDERS
2. RULE 7110, CONTRACTORS LICENSE LAW



PROFILE

SCALE: HORIZONTAL: 1" = 30' VERTICAL: 1" = 2'

PLAN

SCALE: 1" = 30'

Design: PGB	
Drawn: PGB	
Check: KLK	
Revisions:	
Description:	
Date:	
By:	
Submitted:	
Approved:	
KJELDSSEN - SINNOCK & ASSOCIATES, INC.	
CONSULTING CIVIL ENGINEERS	
1111 W. FARMINGTON STREET SACRAMENTO, CALIFORNIA 95811-9425	
WOODBRIDGE SANITARY DISTRICT SANITARY SEWER LINE EXTENSION LOWER SACRAMENTO ROAD PLAN and PROFILE	
Date:	6-89
Job Number:	72-36
Scale:	AS NOTED
Sheet Number:	1 of 2
File Number:	E-1413

B.C.E. JOB NO. 2809